## **Bay Area Air Quality Management District**

939 Ellis Street San Francisco, CA 94109 (415) 771-6000

## **Final**

## MAJOR FACILITY REVIEW PERMIT

**Issued To:** Calpine Gilroy Cogen, L. P. Facility #B1180

**Facility Address:** 

1400 Pacheco Pass Highway Gilroy, CA 95020

**Mailing Address:** 

P.O. Box 1764 Gilroy, CA 95021

**Responsible Official** 

Larry Krumland, Vice-President, (408) 792-1234

**Facility Contact** 

Brian Martin (408) 847-5328

Type of Facility:	Cogeneration Facility	BAAQMD Permit Division Contact
<b>Primary SIC:</b>	4911	Brenda Cabral

**Primary SIC:** 4911

**Product:** Electricity

Signed by Ellen Garvey	May 11, 1998
Ellen Garvey, Air Pollution Control Officer	Date

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Facility Name: Calpine Gilroy Cogen, L.P.
Permit for Facility #: B1180
Expiration Date: December 18, 2003
ID: BFC

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#### I. STANDARD CONDITIONS

#### A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

BAAQMD Regulation 1 - General Provisions and Definitions

(as amended by the District Board on 10/7/98);

SIP Regulation 1 - General Provisions and Definitions

(as approved by EPA through 9/29/98);

BAAQMD Regulation 2, Rule 1 - Permits, General Requirements

(as amended by the District Board on 10/7/98);

SIP Regulation 2, Rule 1 - Permits, General Requirements

(as approved by EPA through 6/23/95);

BAAQMD Regulation 2, Rule 2 - Permits, New Source Review

(as amended by the District Board on 10/7/98);

SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration

(as approved by EPA through 10/19/84); and

BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking

(as amended by the District Board on 10/7/98).

#### B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

- 1. This Major Facility Review Permit expires on December 18, 2003. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than June 18, 2002 and no earlier than December 18, 2002. **If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after December 18, 2003.** (Regulation 2-6-307, 404.2, & 409.6; MOP Volume II, Part 3, §4.2)
- 2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
- 3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
- 4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
- 5. The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non

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### I. Standard Conditions (continued)

compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)

- 6. This permit does not convey any property rights of any sort, nor any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
- 7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
- 8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
- 9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B Public Information, Confidentiality of Business Information. (40 CFR Part 2)
- 10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)

#### C. Requirement to Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

#### **D.** Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

#### E. Records

Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of entry. (Regulation 2-6-501, Regulation 3; MOP Volume II, Part 3, §4.7)

#### F. Monitoring Reports

All required monitoring reports must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. All instances of non-compliance shall be clearly identified in these reports. The reports shall

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### I. Standard Conditions (continued)

be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement Bay Area Air Quality Management District 939 Ellis Street San Francisco, CA 94109 Attn: Title V Reports

(Regulation 2-6-502, Regulation 3; MOP Volume II, Part 3, §4.7)

#### **G.** Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

Director of the Air Division USEPA, Region IX 75 Hawthorne Street San Francisco, CA 94105 Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

#### **H.** Emergency Provisions

- 1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
- 2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond the permit holder's reasonable control by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq.

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#### I. Standard Conditions (continued)

Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to EPA approval. (MOP Volume II, Part 3, §4.8)

3. Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement unless the Major Facility Review Permit has been modified pursuant to Regulation 2, Rule 6. (MOP Volume II, Part 3, §4.8)

#### I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

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## II. EQUIPMENT LIST

## A. Permitted Source List

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits.

Table II-A

S-#	Description	Make or Type	Model	Capacity
S-100	Gas Turbine Generator, Natural	General Electric	Frame 7	87 MW, 938 MM Btu/hr
	Gas, Fuel Oil			
S-101	Auxiliary Boiler, Natural Gas,	Nebraska	NSE68	104 MM Btu/hr
	Fuel Oil			(natural gas)
				101 MM Btu/hr (fuel oil)
S-102	Auxiliary Boiler, Natural Gas,	Nebraska	NSE68	104 MM Btu/hr
	Fuel Oil			(natural gas)
				101 MM Btu/hr (fuel oil)

## **B.** Abatement Device List

Table II-B

		Source(s)	Applicable	Operating	Limit or
<b>A-</b> #	Description	Controlled	Requirement	Parameters	Efficiency
A-100	Catalytic Afterburner	S-100	Cond #2780	Oxidizing Catalyst	80% CO
			part 3	shall operate during	destruction
				all periods of turbine	
				operation except	
				during start-up, which	
				will not exceed one-	
				half hour for warm-	
				start, or one hour for	
				cold start.	

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## III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements would not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit.

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- 1. BAAQMD regulation(s):
  - The date(s) of adoption or most recent amendment of the regulation by the District Board
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP:

The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

Where an applicable requirement is a SIP requirement, the full language of the SIP requirement is included in Appendix A of this permit.

#### **NOTE:**

There are differences between the current BAAQMD rule and the version of the rule in the SIP. For specific information, contact the District's Rule Development Section of the Enforcement Division. All sources must comply with <u>both</u> versions of the rule until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

**Table III** 

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (11/3/93)	N
SIP Regulation 1	General Provisions and Definitions (11/10/82)	Y
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/06/90)	Y
BAAQMD Regulation 5	Open Burning (11/2/94)	N
BAAQMD Regulation 6	Particulate Matter and Visible Emissions (12/19/90)	N

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## III. Generally Applicable Requirements (continued)

## Table III (continued)

		Federally
Applicable	Regulation Title or	Enforceable
Requirement	Description of Requirement	(Y/N)
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95)	Y
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products	N
	(12/20/95)	
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation	Y
	and Manufacturing (12/4/91)	
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting	Y
	(7/11/90)	
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting	Y
	(9/2/81)	
EPA Regulation 40 CFR 82	Protection of Stratospheric Ozone (2/21/95)	
Subpart F, 40 CFR 82.156	Leak Repair	Y
Subpart F, 40 CFR 82.161	Certification of Technicians	Y
Subpart F, 40 CFR 82.166	Records of Refrigerant	Y

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## IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parenthesis in the Title column identify the versions of the regulations being cited and are, as applicable:

- 1. BAAQMD regulation(s):
  - The date(s) of adoption or most recent amendment of the regulation by the District Board
- 2. Any federal requirement, including a version of a District regulation that has been approved into the SIP:
  - The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit. Additionally, where an applicable requirement is a SIP requirement, the full language of the SIP requirement is included in Appendix A of this permit. All other text may be found in the regulations themselves.

Table IV-A S100 - GAS TURBINE

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 1	General Provisions and Definitions (11/3/93)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	Plans and Specifications	Y	
1-522.2	Installation Scheduling	Y	
1-522.3	Performance Testing	Y	
1-522.4	Periods of Inoperation Greater Than 24 Hours	Y	
1-522.5	Calibration	Y	
1-522.6	Accuracy	Y	
1-522.7	Excesses	Y	
1-522.8	Monthly Reports	Y	

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## IV. Applicable Requirements (continued)

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
1-522.9	Records	Y	
1-522.10	Monitors Required by Sections 1-521 or 2-1-403	Y	
1-602	Area and Continuous Emission Monitoring Requirements	N	
SIP	PROVISIONS NO LONGER IN CURRENT RULE		
Regulation 1	General Provisions and Definitions (11/10/82)		
1-541	Emission Excesses	$Y^1$	
1-602	Area and Continuous Emission Monitoring Requirements	Y <sup>1</sup>	
BAAQMD			
Regulation 2,	Regulation 2, Rule 1 – Permits, General Requirements (6/7/95)		
Rule 1			
2-1-501	Monitors	N	
BAAQMD	Particulate Matter and Visible Emissions (12/19/90)		
Regulation 6			
6-301	Ringelmann Number 1 Limitation	N	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD			
Regulation 9,	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	N	
9-1-302	General Emission Limitations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
SIP	PROVISIONS NO LONGER IN CURRENT RULE		
Regulation 9,	Inorganic Gaseous Pollutants – Sulfur Dioxide (5/3/84)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	$\mathbf{Y}^{1}$	

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## IV. Applicable Requirements (continued)

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Inorganic Gaseous Pollutants-Nitrogen Oxides from Stationary Gas		
Regulation 9,	Turbines (9/21/94)		
Rule 9			
9-9-113	Exemption – Inspection/Maintenance	Y	
9-9-114	Exemption – Start-Up/Shutdown	Y	
9-9-305	Emission Limits, Existing Low-NOx Turbines	Y	
9-9-401	Certification, Efficiency	Y	
9-9-501	Monitoring and recordkeeping requirements	Y	
BAAQMD	Continuous Emission Monitoring Policy and Procedures (1/20/82)	Y	
Manual of			
Procedures,			
Volume V			
40 CFR 60	Standards of Performance for New Stationary Sources (12/23/71)	Y	
Subpart A	General Provisions	Y	
60.4(b)	Reports to EPA and District	Y	
60.7(a)	Written notification	Y	
60.7(b)	Records	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.19	General notification and reporting requirements	Y	
Subpart GG	Standards of Performance for Stationary Gas Turbines (1/27/82)		
60.332 (a)(1)	NOx limit	Y	
60.333	Performance Standards, SO2	Y	
60.335	Test Methods and Procedures	Y	
BAAQMD			
Cond# 2780			
part 1	NOX Limit (basis: BACT, PSD)	Y	
part 3a	CO control requirement (basis: BACT)	Y	
part 3b	Annual emission limit (basis: BACT)	Y	
part 3c	CO concentration limit (basis: BACT)	Y	
part 3d	CO emissions during Startup and shutdown periods (BACT)	Y	
part 3e	CO emissions during operation at less than 80 percent load (BACT)	Y	

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## IV. Applicable Requirements (continued)

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
part 3f	CO emissions during operation at low ambient temperature (BACT)	Y	
part 3g	CO emissions during fuel oil combustion (BACT)	Y	
part 5	Fuel oil sulfur limit (basis: BACT)	Y	
part 6	NMHC/TSP Limit (basis: Cumulative increase)	Y	
part 6a	Particulate monitoring	Y	
part 6b	Particulate recordkeeping	Y	
part 7	Natural Gas Curtailment Requirement (basis: BACT, PSD)	Y	
part 8	Steam Injection (basis: BACT)	Y	
part 10a	SO2 Limit (basis: BACT)	Y	
part 10b	SO2 monitoring during fuel oil combustion	Y	
part 11	CEM requirement (basis: PSD, BACT)	Y	
part 13a	Stack height (basis: PSD)	Y	
part 13b	Sampling ports (basis: BAAQMD 1-501)	Y	
part 14	Recordkeeping (basis: PSD, BACT)	Y	
part 15	Fuel oil/NOx limit demonstration (basis: BACT)	Y	
part 17	Fuel Usage limit (basis: Cumulative increase)	Y	
part 18	Hours of Operation (basis: Cumulative increase)	Y	
PSD Permit			
III	Facilities Operation	Y	
V	Right to Entry	Y	
VI	Transfer of Ownership	Y	
VII	Severability	Y	
VIII	Other Applicable Regulations	Y	
IX, C	Emission Limits for NOx	Y	
IX, D	Performance Tests	Y	
IX, E	Continuous Emission Monitoring	Y	
IX, F	Fuel Usage and Sulfur Content/Steam Injection	Y	
IX, G	New Source Performance Standards	Y	

This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

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## IV. Applicable Requirements (continued)

## **Table IV-B S101, S102 – BOILERS**

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 1	General Provisions and Definitions (11/3/93)		
1-522	Continuous Emission Monitoring and Recordkeeping Procedures	Y	
1-522.1	Plans and Specifications	Y	
1-522.2	Installation Scheduling	Y	
1-522.3	Performance Testing	Y	
1-522.4	Periods of Inoperation Greater Than 24 Hours	Y	
1-522.5	Calibration	Y	
1-522.6	Accuracy	Y	
1-522.7	Excesses	Y	
1-522.8	Monthly Reports	Y	
1-522.9	Records	Y	
1-602	Area and Continuous Emission Monitoring Requirements	Y	
SIP	PROVISIONS NO LONGER IN CURRENT RULE		
Regulation 1	General Provisions and Definitions (11/10/82)		
1-541	Emission Excesses	$\mathbf{Y}^{1}$	
1-602	Area and Continuous Emission Monitoring Requirements	$Y^1$	
BAAQMD			
Regulation 2,	Regulation 2, Rule 1 - Permits, General Requirements (6/7/95)		
Rule 1			
2-1-501	Monitors	N	
BAAQMD	Particulate Matter and Visible Emissions (12/19/90)		
Regulation 6			
6-301	Ringelmann Number 1 Limitation	N	
6-305	Visible Particles	Y	
6-310	Particulate Weight Limitation	Y	
6-401	Appearance of Emissions	Y	

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## IV. Applicable Requirements (continued)

## Table IV-B (continued) S101, S102 – BOILERS

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD			
Regulation 9,	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	N	
9-1-302	General Emission Limitations	Y	
9-1-304	Fuel Burning (Liquid and Solid Fuels)	Y	
SIP	PROVISIONS NO LONGER IN CURRENT RULE		
Regulation 9,	Inorganic Gaseous Pollutants - Sulfur Dioxide (5/3/84)		
Rule 1			
9-1-301	Limitations on Ground Level Concentrations	$\mathbf{Y}^{1}$	
BAAQMD	Inorganic Gaseous Pollutants - Nitrogen Oxides and Carbon		
Regulation 9,	Monoxide from Industrial, Institutional, and Commercial		
Rule 7	Boilers, Steam Generators, and Process Heaters (9/15/93)		
9-7-301	Emission Limits-Gaseous Fuel	Y	
9-7-301.1	Emission Limits-NOx	Y	
9-7-301.2	Emission Limits-CO	Y	
9-7-302	Emission Limits-Non-Gaseous Fuel	Y	
9-7-302.1	Emission Limits-NOx	Y	
9-7-302.2	Emission Limits-CO	Y	
9-7-303	Emission Limits-Gaseous Fuels-and Non-Gaseous Fuel	Y	
9-7-305	Natural Gas Curtailment-Non-Gaseous Fuel	Y	
9-7-305.1	Natural Gas Curtailment-Non-Gaseous Fuel: NOx limit	Y	
9-7-305.2	Natural Gas Curtailment-Non-Gaseous Fuel: CO limit	Y	
9-7-306	Equipment Testing Non-Gaseous Fuel	Y	
9-7-306.1	Emission Limits-NOx	Y	
9-7-306.2	Emission Limits-CO	Y	
9-7-306.3	Time limit	Y	
9-7-501	Combinations of Different Fuels	Y	
9-7-503	Records	Y	
9-7-503.2	Records of natural gas curtailment	Y	
9-7-503.3	Records of equipment testing	Y	
9-7-503.4	Source test records	Y	

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## IV. Applicable Requirements (continued)

## Table IV-B (continued) S101, S102 – BOILERS

		Federally	Future
Applicable	Regulation Title or	Enforceable	Effective
Requirement	Description of Requirement	(Y/N)	Date
BAAQMD	Continuous Emission Monitoring Policy and Procedures		
Manual of	(1/20/82)		
Procedures,			
Volume V			
40 CFR 60	Standards of Performance for New Stationary Sources (12/23/71)	Y	
Subpart A	General Provisions	Y	
60.4(b)	Reports to EPA and District	Y	
60.7(a)	Written notification	Y	
60.7(b)	Records	Y	
60.8	Performance Tests	Y	
60.9	Availability of Information	Y	
60.11(a)	Compliance with standards and maintenance requirements	Y	
60.11(d)	Minimizing emissions	Y	
60.12	Circumvention	Y	
60.19	General notification and reporting requirements	Y	
Subpart Db	Standards of Performance for Industrial-Commercial-Institutional	Y	
	Steam Generating Units (12/16/87)		
60.40b (b)(3)	NOX limits (Not subject to SO2 and particulate limits)	Y	
60.44b	NOx limit applicable at all times	Y	
(a)(1)(ii)			
60.44b	Compliance: 24-hr day basis	Y	
(a)(1)(ii)			
BAAQMD Cond #2780			
part 3b	Annual emission limit (basis: BACT)	Y	
Part 4	<u> </u>		
	NOx limit (basis: PSD, BACT)	Y	
part 5	Fuel oil sulfur limit (basis: BACT)	Y	
part 7a	Natural Gas Curtailment Requirement (basis: BACT, PSD)	Y	
part 10a	SO <sub>2</sub> Limit (basis: BACT)	Y	
part 10b	SO2 monitoring during fuel oil combustion	Y	
part 13b	Sampling ports (BAAQMD 1-501)	Y	
part 14	Recordkeeping (basis: PSD, BACT)	Y	

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## IV. Applicable Requirements (continued)

## Table IV-B (continued) S101, S102 – BOILERS

Applicable	Regulation Title or	Federally Enforceable	Future Effective
Requirement	Description of Requirement	(Y/N)	Date
PSD Permit			
III	Facilities Operation	Y	
VIII	Other Applicable Regulations	Y	
IX, C	Emission Limits for NOx	Y	
IX, D	Performance Tests	Y	
IX, F	Fuel Usage and Sulfur Content	Y	

This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.

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#### V. SCHEDULE OF COMPLIANCE

The permit holder shall continue to comply with all applicable requirements cited in this permit. The permit holder shall also comply with applicable requirements that become effective during the term of this permit.

#### VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk is not federally enforceable.

### A. Source-Specific Permit Conditions

Calpine Gilroy Cogen, L. P.

Facility #B1180

PERMIT CONDITION #2780 (amended August 29, 1987, June 27, 1989, September 13, 1990 [APPLICATION NO. 5140], May, 1998 [Application #25841], and December, 1998 [Application #18872])

- 1a. Except as provided in condition 7, the oxides of nitrogen (NOx) concentration in the gas turbine exhaust shall not exceed 25 ppmdv at 15% oxygen averaged over any three-hour period whether firing natural gas or fuel oil. (BACT, PSD)
- 1b. This limit shall not apply during cold start-up, which is not to exceed four hours, or shut-down procedure, which is not to exceed two hours. However, for daily start-ups after a shut-down of twelve (12) hours or less, the start-up period shall be limited to one (1) hour. (BACT)
- 1c. During any mode of operation, the owner or operator shall inject steam for NOx control at the turbine when steam of specified pressure and temperature is available. (BACT, PSD)
- 2. (deleted BAAQMD Title V application #25841)
- 3a. An oxidizing catalyst (A100) shall reduce CO emissions from the gas turbine (S100). The catalyst shall operate during all periods of turbine operation except during start-up, which shall not exceed one hour for warm start, or four hour for a cold start. (9/98 BACT)
- 3b. Annual CO emissions shall not exceed 100 tons in any consecutive twelve months for the entire facility. Sampling ports for testing for compliance with this condition shall be maintained as approved by the District's Source Test Section. (6/27/89) (BACT)

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

Condition #2780 For S100 - GAS TURBINE, S101 AND S102, BOILERS

- 3c. CO emissions in the gas turbine exhaust shall not exceed 10 ppmdv at 15% oxygen over any three-hour period whether firing natural gas or fuel oil. (9/98 BACT)
- 3d. The limit in paragraph 3c shall not apply during startup and shutdown periods. Emissions during startup and shutdown periods shall be limited to 14670 lbs per any consecutive twelve months. (6/27/89 BACT)
- 3e. The limit in paragraph 3c shall not apply during operation at less than 80 percent load, which is not to exceed 750 hours in any consecutive twelve months. The emissions during operation at less than 80 percent load shall not exceed 14.8 tons per any consecutive twelve months. (9/98 BACT)
- 3f. The limit in paragraph 3c shall not apply when ambient temperature is less than 35 degrees F. The CO limit when ambient temperature is less than 35 degrees F shall be 15 ppmdv, averaged over one hour. Operation at this alternate limit shall be limited to 100 hours in any consecutive twelve-month period. Emissions of CO while operating under this condition shall be limited to 3120 lbs in any consecutive twelve-month period. (9/98 BACT)
- 3g. The limit in paragraph 3c shall not apply during periods of natural gas curtailment and for short testing periods using non-gaseous fuel. However, the operator shall shut down the facility and apply for an increase in the CO limit if operating with non-gaseous fuel causes the facility to exceed the annual CO limit in paragraph 3b.
- 4. Nitrogen oxide (NOx) emissions from each auxiliary boiler (S-101, S-102) shall not exceed 40 ppmdv at 3% oxygen averaged over any three-hour period. (PSD, BACT)
- 5. Any fuel oil fired (except as provided in condition #7) shall not exceed a maximum sulfur content of 0.12% (by weight). The owner or operator shall maintain records on the duration of fuel oil firing, the sulfur content, and in which operating sources fuel oil firing took place. All fuel receipts must be certified to 0.12% weight sulfur or less. (PSD, BACT)
- 6. Total emissions from the gas turbine (S-100) and auxiliary boilers (S-101, S-102) shall not exceed 25 ton/year TSP or 40 ton/yr NMHC. (Cumulative increase)

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

Condition #2780
For S100 - GAS TURBINE,
S101 AND S102, BOILERS

- 6a. As long as natural gas is burned exclusively at the turbine and boilers, particulate emissions shall not be monitored. Within 2 weeks of fuel oil use at \$100, Turbine, or \$101-\$102, Boilers, the permit holder shall have source tests performed to measure TSP from the source or sources burning fuel oil. As a contingency measure, the permit holder shall submit a proposed test protocol to the Source Test group at the District within 3 months of issuance of this permit for approval. The permit holder shall notify the Source Test group at least one week prior to performing the test or tests. The test or tests shall form the basis for the emission factor or factors to be used when burning fuel oil. (basis: Regulation 2-6-501)
- 6b. After fuel oil firing has commenced, the permit holder shall keep records of fuel oil firing to determine whether the 25 tpy limit for TSP has been violated. The permit holder shall use these records to determine the TSP emissions on a rolling twelve month basis. In this case, the emission factors used for natural gas burning shall be:

Turbine: 2.5 lb/hr

Boilers: 5 lb/mmscf natural gas (basis: Regulation 2-6-501)

- 7a. During periods of natural gas curtailment, the maximum sulfur content of the fuel oil burned shall not exceed 0.25% (by weight), provided that the gas turbine was being fired on natural gas prior to the curtailment.
- 7b. During such periods, the NOx emission limit in condition #1 shall not apply.

NOx will be controlled via steam injection at no less than the rate determined by the steam/fuel ratio specified for natural gas firing and no greater than the lesser of the rate determined by the manufacturers recommended maximum steam/fuel ratio or 83,000 lb/hr (at 59 F). (PSD, BACT)

- 8. The steam injection to control NOx emissions from the turbine shall be operated during all periods when injection steam is available at the specified pressure and temperature. (BACT)
- 9. Pursuant to the PSD permit, the owner or operator shall install and operate a

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

Condition #2780 For S100 - GAS TURBINE, S101 AND S102, BOILERS

continuous monitoring system to monitor and record the fuel consumption and the ratio of steam injected to fuel fired in the turbine. (PSD, 2-1-403)

- 10a. The emissions of sulfur dioxide (SO2) shall not exceed 3087 lb/day from the entire facility, except under natural gas curtailment as stated in condition #7. (BACT)
- 10b. The daily SO2 limit shall not be monitored when the facility burns natural gas exclusively. When the facility burns fuel oil, and is not operating under natural gas curtailment, the SO2 limit shall be monitored by calculating the SO2 emitted using the following equation:

lb SO2 emitted/day = (fuel oil burned) x (density fuel oil) x (%S by weight) x (2.0 lb SO2/lb S)

Fuel oil shall be measured in gal/day. Density shall be measured in lb/gal. The owner or operator may measure the density or use a default value of 7.20 lb/gal. The sulfur content shall be as certified by the supplier. The owner or operator shall calculate the SO2 emitted on a daily basis when the facility burns fuel oil, unless the facility is under natural gas curtailment. In addition to the records required by Condition 6b, the following records shall be kept:

sulfur content of the fuel by weight density of the fuel SO2 emitted (Regulation 2-6-501)

- 11. The owner or operator shall install, calibrate and operate District approved continuous in-stack emission monitors for nitrogen oxides, carbon monoxide, and either oxygen or carbon dioxide at the turbine and the boilers. (PSD, BACT, 2-1-403)
- 12. (deleted BAAQMD Title V application #25841)

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

Condition #2780 For S100 - GAS TURBINE, S101 AND S102, BOILERS

- 13a. The exhaust stack from the gas turbine (P-100) shall be constructed to a height of at least 80 feet. (PSD)
- 13b. Sampling ports for testing for compliance with these conditions shall be maintained as approved by the District's Source Test Division. (BAAQMD 1-501)
- 14. All records associated with the above conditions shall be retained by the owner or operator, for at least five years, for review by the District and shall be supplied to the District upon request. The recording format of conditions #5, #9, and #17 shall be subject to the approval of the APCO. (PSD, BACT)
- 15. Prior to burning fuel oil as the primary fuel in the gas turbine, the owner or operator shall demonstrate to the satisfaction of the APCO, during an approved test period, that the "quiet combustor" is capable of meeting the emission requirements for condition #1. If within six months of initial start-up of fuel oil as a discretionary fuel, the applicant is unable to achieve the concentration limitation of 25 ppm, the applicant shall take action to install a selective catalytic reduction system, or another APCO approved equivalent control system capable of satisfying the emission limit in condition #1. (BACT)
- 16. (deleted BAAQMD Title V application #25841)
- 17. In order to assure that the offset trigger levels for NMHC (40 TPY) and the PSD modeling trigger level for TSP (25 TPY) are not exceeded, total fuel oil usage in the gas turbine (S-100) shall not exceed 0.55 million barrels/year, except as provided below: "If the owner or operator can demonstrate, through the use of District approved source test methods, that the mass emissions of NMHC exiting the catalytic converter are less than those used to establish the above barrel limitation, then that limit may be renegotiated." (Cumulative increase)
- 18. The auxiliary boilers (S-101, S-102) shall not operate simultaneously with the gas turbine more than a combined total of 28 boiler hours/day or 3950 boiler hours/year. The auxiliary boilers may operate any time during period of gas turbine outage. (9/13/90) (Cumulative increase)

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

Condition #14299
For S100 - GAS TURBINE,
S101 AND S102, BOILERS

1. All natural gas burned at sources \$100, Gas Turbine, and \$101-102, Boilers shall be PUC quality gas. (basis: 2-1-403)

Following are the PSD conditions imposed by EPA before construction in 1985. For **S100 - GAS TURBINE**,

S101 AND S102, BOILERS

- I. (deleted BAAQMD Title V application #25841)
- II. (deleted BAAQMD Title V application #25841)
- III. Facilities Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Approval to Construct/Modify shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. (PSD)

- IV. (deleted BAAQMD Title V application #25841)
- V. Right to Entry

The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local air pollution control agency, and/or their authorized representatives, upon the presentation of credentials, shall be permitted:

- A. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Approval to Construct/Modify; and
- B. at reasonable times to have access to and copy any records required to be kept **PSD Conditions**

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

For S100 - GAS TURBINE, S101 AND S102, BOILERS

under the terms and conditions of this Approval to Construct/Modify; and

- C. to inspect any equipment, operation, or method required in this Approval to Construct/Modify; and
- D. to sample emissions from the source. (PSD)
- VI. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed or modified, this Approval to Construct/Modify shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Approval to Construct/Modify and its conditions by letter, a copy of which shall be forwarded to the State and local Air Pollution Control Agency. (PSD)

#### VII. Severability

The provisions of this Approval to Construct/Modify are severable, and, if any provision of this Approval to Construct/Modify is held invalid, the remainder of this Approval to Construct/Modify shall not be affected thereby. (PSD)

#### VIII. Other Applicable Regulations

The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. (PSD)

- IX. Special Conditions
- A. (deleted BAAQMD Title V application #25841)
- B. Air Pollution Control Equipment

On and after the date of startup of the facility, the owner or operator shall install, **PSD Conditions** 

For S100 - GAS TURBINE,

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#### VI. Permit Conditions (continued)

### **A. Source-Specific Permit Conditions (continued)**

#### S101 AND S102, BOILERS

continuously operate, and maintain a steam injection system to reduce emission of nitrogen oxides from the gas turbine.

#### C. Emission Limits for NOX

On and after the date of startup of the gas turbine, the owner or operator shall not discharge or cause the discharge into the atmosphere NOX in excess of 25 ppmv at 15% O2 (3-hour average). (PSD)

This limit shall not apply during cold start-up, which is not to exceed four hours, or shut-down procedure, which is not to exceed two hours. However, for daily start-ups after a shut-down of twelve (12) hours or less, the start-up period shall be limited to one (1) hour.

On and after the date of startup of the auxiliary boilers, the owner or operator shall not discharge or cause the discharge into the atmosphere NOX in excess of 40 ppmv at 3% O2 (3-hour average). (PSD)

#### D. Performance Tests

- 1. The owner or operator shall conduct performance tests for NOX and furnish the Bay Area Air Quality Management District and the EPA a written report of the results of such tests upon written request of EPA or the District. Any test for NOX shall be conducted at the maximum capacity of the facility being tested. (PSD)
- 2. Performance tests for the emissions of NOx, shall be conducted and the results reported in accordance with the test method set forth in 40 CFR 60, Part 60.8 and Appendix A. Performance tests for the emission of NOX shall be conducted using EPA Methods 7 and 20. (PSD)

The EPA (Attn: A-3-3) shall be notified in writing at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test. (PSD)

**PSD Conditions**For **S100 - GAS TURBINE**,

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

#### S101 AND S102, BOILERS

Such prior approval shall minimize the possibility of EPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the EPA. (PSD)

#### E. Continuous Emission Monitoring

1. Prior to the date of startup and thereafter, the owner or operator shall install, maintain and operate the following continuous monitoring systems in the heat recovery steam generator exhaust stack:

Continuous monitoring systems to measure stack gas NOX concentration, fuel usage, steam-to-fuel ratio, and either O2 or CO2 concentrations. The systems shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specifications). (PSD)

- 2. The owner or operator shall maintain a file of all measurements, including continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurement, maintenance, reports and records. (PSD)
- 3. The owner or operator shall submit a written report of all excess emissions to EPA (Attn: A-3-3) for every calendar quarter. The report shall include the following:
  - a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions. (PSD)
  - b. Specific identification of each period of excess emissions that occurs during start-ups, shutdowns and malfunctions of the cogeneration gas turbine system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted shall also be

**PSD Conditions** 

For S100 - GAS TURBINE,

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

#### S101 AND S102, BOILERS

reported. (PSD)

- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments. (PSD)
- d. When no excess emission have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report. (PSD)
- e. Excess emissions shall be defined as any three-hour period during which the average emissions of NOX, as measured by the continuous monitoring system, exceeds the NOX maximum emission limits set forth in Conditions IX. C. (PSD)
- 4. Excess emission indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. (PSD)

#### F. Fuel Usage and Sulfur Content

Any fuel oil fired (except as provided below) shall not exceed a maximum sulfur content 0.12% (by weight). The owner or operator shall maintain records on the duration of fuel oil firing, the sulfur content, and in which operating sources fuel oil firing took place. All fuel oil receipts must be certified to 0.12% weight sulfur or less except as provided below. (PSD)

During periods of natural gas curtailment, the maximum sulfur content of the fuel oil burned shall not exceed 0.25% (by weight), provided that the gas turbine was being fired on natural gas prior to the curtailment. (PSD)

During such periods, the gas turbine NOX emission limit in Special Condition C shall not apply; NOX shall be controlled via steam injection at no less than the rate determined by the steam/fuel ration specified for natural gas firing and no greater than the lesser of the ratio determined by the manufacturer recommended maximum steam/fuel ratio or 83,000 lb/hr at (59 degrees F). (PSD)

#### **PSD Conditions**

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### **VI. Permit Conditions (continued)**

## **A. Source-Specific Permit Conditions (continued)**

For S100 - GAS TURBINE, S101 AND S102, BOILERS

The owner or operator shall not consume more than 193,000 gallons of fuel oil per day or 24.4 million gallons per year when firing fuel oil. (PSD)

The owner or operator shall maintain records of the amount of fuel used in the gas turbine and auxiliary boilers, and the sulfur content of the fuel, in a permanent form suitable for inspection for EPA and the Bay Area AQMD. The record shall be maintained for at least five years following the date of its making. (PSD)

#### G. New Source Performance Standards

The proposed facility is subject to the Federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. (PSD)

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## VII. APPLICABLE EMISSION LIMITS & COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown, either annual (A), quarterly (Q), monthly (M), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

Table VII-A S100 - GAS TURBINE

Type of	Emission		Future		Monitoring	Monitoring	
limit	Limit	FE	Effective		Requirement	Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
NOx	BAAQMD	Y		Natural Gas	BAAQMD	С	CEM
	9-9-305			≤ 21.6 ppmv @ 15% O <sub>2</sub> ,	9-9-501		
				dry, 3-hr avg			
				Natural gas curtailment,			
				≤ 42 ppmv @ 15% O <sub>2</sub> , dry			
				3-hr avg			
	BAAQMD	Y		Natural Gas or Fuel Oil	BAAQMD	С	CEM
	Permit			$\leq$ 25 ppmv @ 15% O <sub>2</sub> , 3-hr	Permit		
	Condition			avg	Condition		
	2780 part 1				2780, part 11		
	PSD permit,	Y		Natural Gas or Fuel Oil	PSD permit,	С	CEM
	part IX-C.			≤ 25 ppmv @ 15% O <sub>2</sub> , dry	part IX-D.		
				3-hr avg			
	PSD permit,	Y		Natural Gas or Fuel Oil	PSD permit,	С	CEM
	part IX-C.			≤ 25 ppmv @ 15% O <sub>2</sub> , dry	part IX-E.		
				3-hr avg			

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# VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

Type of	Emission		Future		Monitoring	Monitoring	
limit	Limit	FE	Effective		Requirement	Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Туре
NOX	NSPS, 40	Y		95 ppmv, @ 15% O2,	Monitoring	С	CEM
	CFR			dry	requirement		
	60.332				subsumed by		
	(a)(1)				PSD permit.		
					See Permit		
					Shield.		
POC	BAAQMD	Y		< 40 TPY NMHC for	BAAQMD	С	fuel oil
	Permit			S100, S101, S102	Permit		meter
	Condition				Condition		
	2780 part 6				2780, part 17		
SO2	BAAQMD	N		GLC <sup>1</sup> of 0.5 ppm for 3		N	
	9-1-301			min or 0.25 ppm for			
				60 min or 0.05 ppm			
				for 24 hours			
	BAAQMD	Y		300 ppm (dry)		N	
	9-1-302						
	BAAQMD	Y		Sulfur content of fuel		N	
	9-1-304			<0.5% by weight			
	SIP	Y		Federal std: GLC <sup>1</sup> of		N	
	9-1-301			140 ppb, 24-hr			
				average, once/yr and			
				30 ppb, annual			
				average			
				State std: GLC <sup>1</sup> of 40			
				ppb, 24-hr average,			
				and 250 ppb, 1 hr			
				average			
	BAAQMD	Y		Sulfur content of fuel	BAAQMD	P/E	fuel
	Permit			<0.12% by weight	Permit		certification
	Condition				Condition		by vendor
	2780 part 5				2780 part 5		

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# VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

Type of	Emission		Future		Monitoring	Monitoring	
limit	Limit	FE	Effective		Requirement	Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
SO2	BAAQMD	Y		Sulfur content of fuel	BAAQMD	P/E	fuel
	Permit			<0.25% by weight	Permit		certification
	Condition			under natural gas	Condition		by vendor
	2780 part 7			curtailment	2780 part 5		
SO2	BAAQMD	Y		< 3087 lb/day for	BAAQMD	P/E	fuel analysis
	Permit			entire facility, except	Permit	(during use	and SO2
	Condition			under natural gas	Condition	of fuel oil	calculation
	2780 part			curtailment	2780 part 10b	only)	
	10						
	PSD	Y		Sulfur content of fuel	PSD permit,	P/E	fuel
	permit, part			<0.12% by weight	part IX-F		certification
	IX-F						by vendor
	PSD	Y		Sulfur content of fuel	PSD permit,	P/E	fuel
	permit, part			<0.25% by weight	part IX-F		certification
	IX-F			under natural gas			by vendor
				curtailment			
	NSPS	Y		Natural gas	Monitoring	N	
	Subpart			combustion:	requirement		
	GG, 60.333			0.015% (vol)	subsumed by		
	(a)			@15% O <sub>2</sub> (dry)	Title V		
					condition. See		
					Permit Shield.		
	NSPS	Y		Fuel oil combustion:	Monitoring	N	
	Subpart			0.8 % sulfur in fuel by	requirement		
	GG, 60.333			weight	subsumed by		
	(b)				PSD condition.		
					See Permit		
					Shield.		
TSP	BAAQMD	N		Ringelmann No. 1		N	
	6-301						
	BAAQMD	Y		0.15 grain/dscf		N	
	6-310			@ 6% O2			

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# VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

Type of	Emission		Future		Monitoring	Monitoring	
limit	Limit	FE	Effective		Requirement	Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
TSP	BAAQMD	Y		< 25 TPY total TSP		N	
	Permit			for S100, S101, S102			
	Condition			(natural gas			
	2780 part 6			combustion)			
	BAAQMD	Y		< 25 TPY total TSP	BAAQMD	P/E	initial source
	Permit			for S100, S101, S102	Permit		test, records
	Condition			(fuel oil combustion)	Condition		
	2780 part 6				2780 part 6a		
					and 6b		
Fuel Oil	PSD	Y		193,000 gal/day, 24.4	PSD permit,	С	fuel oil
usage	permit, IX,			million gal/yr	IX, E		meter,
	F						records
	BAAQMD	Y		0.55 million barrels/yr	BAAQMD	C	fuel oil
	Permit				Permit		meter,
	Condition				Condition		records
	2780 part				2780 part 9		
	17						
Carbon	BAAQMD	Y		emissions < 100	BAAQMD	C	CEM
Monoxide	Permit			tons/yr (entire facility)	Permit		
	Condition				Condition		
	2780 part				2780 part 11		
	3b						
	BAAQMD	Y		10 ppmdv @ 15% O2,	BAAQMD	C	CEM
	Permit			3-hr average, except	Permit		
	Condition			during startup,	Condition		
	2780 part			shutdown, operation at	2780 part 11		
	3c			< 80% load, fuel oil			
				combustion, and			
				operation at low			
				ambient temperature			

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# VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

Type of	Emission		Future		Monitoring	Monitoring	
limit	Limit	FE	Effective		Requirement	Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Туре
Carbon	BAAQMD	Y		< 14670 lbs CO	BAAQMD	С	CEM
Monoxide	Permit			during startups and	Permit		
	Condition			shutdowns per any	Condition		
	2780 part			consecutive 12-month	2780 part 11		
	3d			period			
	BAAQMD	Y		< 750 hours of	BAAQMD	С	CEM
	Permit			operation at < 80%	Permit		
	Condition			load per any	Condition		
	2780 part			consecutive 12-month	2780 part 11		
	3e			period			
	BAAQMD	Y		< 14.8 tons CO during	BAAQMD	С	CEM
	Permit			operation at < 80%	Permit		
	Condition			load per any	Condition		
	2780 part			consecutive 12-month	2780 part 11		
	3e			period			
	BAAQMD	Y		< 100 hours of	BAAQMD	С	CEM
	Permit			operation at ambient	Permit		
	Condition			temperatures $< 35^{\circ}$ F.	Condition		
	2780 part			per any consecutive	2780 part 11		
	3f			12-month period			
	BAAQMD	Y		15 ppmdv @ 15% O2,	BAAQMD	С	CEM
	Permit			1-hr average, during	Permit		
	Condition			operation at low	Condition		
	2780 part			ambient temperature	2780 part 11		
	3f						

<sup>&</sup>lt;sup>1</sup> Ground Level Concentration

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# VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

Table VII-B S101, S102 – BOILERS

Type of limit	Emission Limit	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Туре
NOX	BAAQMD	Y		30 ppmv @3%O2,	BAAQMD	С	CEM
	9-7-301.1			dry, 3-hr avg	Permit		
					Condition		
					2780 part 11		
	BAAQMD	Y		40 ppmv @3%O2,	BAAQMD	С	CEM
	9-7-302.1			dry, 3-hr avg	Permit		
					Condition		
					2780 part 11		
	BAAQMD	Y		Weighted average of	BAAQMD	С	Non-resettable
	9-7-303			9-7-301.1 and	9-7-501		fuel meters
				9-7-302.1, 3-hr avg			
	BAAQMD	Y		150 ppmv @ 3%O2,		N	
	9-7-305.1			dry, 3-hr avg			
	BAAQMD	Y		150 ppmv @ 3%O2,		N	
	9-7-306.1			dry, 3-hr avg			
	BAAQMD	Y		40 ppmv @ 3%O2,	BAAQMD	С	CEM
	Permit			dry, , 3-hr avg	Permit		
	Condition				Condition		
	2780 part 3				2780 part 11		
	PSD	Y		Natural Gas or Fuel	PSD permit,	С	CEM
	permit, part			Oil	part IX-D.		
	IX-C.			$\leq$ 40 ppmv @ 3% $O_{2}$ ,			
				dry, 3-hr avg			
	NSPS	Y		0.2 lb/MM Btu,	Monitoring	N	
	40.60b			averaged over 24 hrs	requirement		
	(a)(1)(ii)				subsumed by		
					BACT cond.		
					#2780, parts 3		
					and 11. See		
					Permit Shield.		

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# VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

## Table VII-B (continued) S101, S102 – BOILERS

Type of limit	Emission Limit	FE	Future Effective		Monitoring Requirement	Monitoring Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
CO	BAAQMD	Y		400 ppmv @3%O2,		N	
	9-7-301.2			dry, 3-hr avg			
	BAAQMD	Y		400 ppmv @3%O2,		N	
	9-7-302.2			dry, 3-hr avg			
CO	BAAQMD	Y		Weighted average of	BAAQMD	С	Non-resettable
	9-7-303			9-7-301.1 and	9-7-501		fuel meters
				9-7-302.1, 3-hr avg			
	BAAQMD	Y		400 ppmv @3%O2,	BAAQMD	N	records
	9-7-305.2			dry, 3-hr avg	9-7-503.2		
	BAAQMD	Y		400 ppmv @3%O2,	BAAQMD	N	records
	9-7-306.2			dry, 3-hr avg	9-7-503.3		
	BAAQMD	Y		< 100 tons per year,	BAAQMD	С	CEM
	Permit			entire facility	Permit		
	Condition				Condition		
	2780 part				2780 part 11		
	3b						
SO2	BAAQMD	N		GLC <sup>1</sup> of 0.5 ppm for 3		N	
	9-1-301			min or 0.25 ppm for			
				60 min or 0.05 ppm			
				for 24 hours			
	BAAQMD	Y		300 ppm (dry)		N	
	9-1-302						
	BAAQMD	Y		Sulfur content of fuel		N	
	9-1-304			<0.5% by weight			

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# VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

## Table VII-B (continued) S101, S102 – BOILERS

Type of	Emission		Future		Monitoring	Monitoring	
limit	Limit	FE	Effective		Requirement	Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
SO2	SIP	Y		Federal std: GLC <sup>1</sup> of		N	-JP-
	9-1-301			140 ppb, 24-hr			
				average, once/yr and			
				30 ppb, annual			
				average			
				State std: GLC <sup>1</sup> of 40			
				ppb, 24-hr average,			
				and 250 ppb, 1 hr			
				average			
	BAAQMD	Y		Sulfur content of fuel	BAAQMD	P/E	Fuel
	Permit			<0.12% by weight	Permit		certification by
	Condition				Condition		vendor
	2780 part 5				Number 2780		
					part 5		
	BAAQMD	Y		Sulfur content of fuel	BAAQMD	P/E	Fuel
	Permit			<0.25% by weight	Permit		certification by
	Condition			under natural gas	Condition		vendor
	2780 part			curtailment	2780 part 5		
	7a						
	BAAQMD	Y		< 3087 lb/day for	BAAQMD	P/E	fuel analysis
	Permit			entire facility, except	Permit	(during use	and SO2
	Condition			under natural gas	Condition	of fuel oil	calculation
	2780 part			curtailment	2780 part 10b	only)	
	10						
	PSD	Y		Sulfur content of fuel	PSD permit,	P/E	fuel
	permit, IX,			<0.12% by weight	IX, F		certification by
	F						vendor
	PSD			Sulfur content of fuel	PSD permit,	P/E	fuel
	permit, IX,			<0.25% by weight	IX, F		certification by
	F			under natural gas			vendor
				curtailment			

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# VII. Applicable Emission limits & Compliance Monitoring Requirements (continued)

# Table VII-B (continued) S101, S102 – BOILERS

Type of	Emission		Future		Monitoring	Monitoring	
limit	Limit	FE	Effective		Requirement	Frequency	Monitoring
	Citation	Y/N	Date	Emission Limit	Citation	(P/C/N)	Type
TSP	BAAQMD	Y		< 25 TPY TSP for	BAAQMD	P/E	initial source
	Permit			S100, S101, S102	Permit		test, records
	Condition				Condition		
	2780 part 6				Number 2780		
					part 6a and 6b		
	BAAQMD	N		Ringelmann No. 1		N	
	6-301						
	BAAQMD	Y		0.15 grain/dscf		N	
	6-310			@ 6% O2			
POC	BAAQMD	Y		< 40 TPY NMHC for	BAAQMD	С	fuel oil meter
	Permit			S100, S101, S102	Permit		
	Condition				Condition		
	2780 part 6				2780 part 17		
Fuel Oil	PSD	Y		193,000 gal/day, 24.4	PSD permit,	P/E	fuel oil meter,
usage	permit, IX,			million gal/yr	IX, E		records
	F						
	BAAQMD	Y		0.55 million barrels/yr	BAAQMD	P/E	records
	Permit				Permit		
	Condition				Condition		
	2780 part				2780 part 5		
	17						
Hours of	BAAQMD	Y		Simultaneous use with	none	P/E	records
operation	Permit			the gas turbine <			
	Condition			combined total of 28			
	2780 part			boiler hours/day or			
	18			3950 boiler hours/year			

<sup>&</sup>lt;sup>1</sup> Ground Level Concentration

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# VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally found in Section 600 of the regulation. The following table indicates only the test methods associated with the emission limits referenced in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

**Table VIII** 

Applicable			
Requirement	Description of Requirement	Acceptable Test Methods	
BAAQMD	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions	
6-301			
BAAQMD	Tube Cleaning	Manual of Procedures, Volume I, Evaluation of Visible Emissions	
6-304			
BAAQMD	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulates Sampling	
6-310			
BAAQMD	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,	
9-1-302		Continuous Sampling, or	
		ST-19B, Total Sulfur Oxides Integrated Sample	
BAAQMD	Fuel Burning (Liquid and Solid	Manual of Procedures, Volume III, Method 10, Determination of	
9-1-304	Fuels)	Sulfur in Fuel Oils.	
BAAQMD	Performance Standard, NOx,	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,	
9-7-301.1	Gaseous Fuel	Continuous Sampling and	
		ST-14, Oxygen, Continuous Sampling	
BAAQMD	Performance Standard, CO,	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,	
9-7-301.2	Gaseous Fuel	Continuous Sampling and	
		ST-14, Oxygen, Continuous Sampling	
BAAQMD	Performance Standard, NOx,	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,	
9-7-302.1	Non-Gaseous Fuel	Continuous Sampling and	
		ST-14, Oxygen, Continuous Sampling	
BAAQMD	Performance Standard, CO, Non-	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,	
9-7-302.2	Gaseous Fuel	Continuous Sampling and	
		ST-14, Oxygen, Continuous Sampling	
BAAQMD	Natural Gas Curtailment	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,	
9-7-305.1	Performance Standard, NOx	Continuous Sampling and	
		ST-14, Oxygen, Continuous Sampling	
BAAQMD	Natural Gas Curtailment	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,	
9-7-305.2	Performance Standard, CO	Continuous Sampling and	
		ST-14, Oxygen, Continuous Sampling	

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# **VIII.** Test Methods (continued)

# Table VIII (continued)

Applicable				
Requirement	Description of Requirement	Acceptable Test Methods		
BAAQMD	Equipment Testing – Non-	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,		
9-7-306.1	Gaseous Fuel NOX Performance	Continuous Sampling and		
	Standard	ST-14, Oxygen, Continuous Sampling		
BAAQMD	Equipment Testing - Non-	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,		
9-7-306.2	Gaseous Fuel CO Performance	Continuous Sampling and		
	Standard	ST-14, Oxygen, Continuous Sampling		
BAAQMD	Emission Limits- Existing Low	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,		
9-9-305	NOx Turbines	Continuous Sampling and		
		ST-14, Oxygen, Continuous Sampling		
BAAQMD	Deadline for Demonstration of	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,		
9-9-503.2	Compliance with §9-9-301	Continuous Sampling and		
		ST-14, Oxygen, Continuous Sampling		
BAAQMD				
Cond# 2780				
part 1	NOX Limit (basis: BACT, PSD)	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,		
		Continuous Sampling and		
		ST-14, Oxygen, Continuous Sampling		
part 3	CO control requirement and	Manual of Procedures, Volume IV, ST-6, Carbon Monoxide,		
	Limit (basis: BACT)	Continuous Sampling and		
		ST-14, Oxygen, Continuous Sampling		
part 4	NOx Limit (basis: PSD, BACT)	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,		
		Continuous Sampling and		
		ST-14, Oxygen, Continuous Sampling		
part 5	Fuel oil sulfur limit (basis:	Manual of Procedures, Volume III, Method 10, Determination of		
	BACT)	Sulfur in Fuel Oils.		
part 6	NMHC/TSP Limit (basis:	Manual of Procedures, Volume IV, ST-7, Non-Methane Organic		
	Cumulative increase)	Carbon Sampling, and		
		Manual of Procedures, Volume IV, ST-15, Particulates Sampling		
part 7	Natural Gas Curtailment	Manual of Procedures, Volume III, Method 10, Determination of		
	Requirement (basis: BACT,	Sulfur in Fuel Oils.		
	PSD)			

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# VIII. Test Methods (continued)

# Table VIII (continued)

Applicable				
Requirement Description of Requirement		Acceptable Test Methods		
part 10	SO <sub>2</sub> Limit (basis: BACT)	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide,		
		Continuous Sampling, or		
		ST-19B, Total Sulfur Oxides Integrated Sample		
part 15	Fuel oil/NOx limit demonstration	Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen,		
	(basis: BACT)	Continuous Sampling and		
		ST-14, Oxygen, Continuous Sampling		
NSPS	Standards of Performance for			
Subpart GG	Stationary Gas Turbines			
	(1/27/82)			
60.332 (a)(1)	Performance Standard, NOx	EPA Method 20, Determination of Nitrogen Oxides, Sulfur		
		Dioxide, and Diluent Emissions from Stationary Gas Turbines		
60.333 (a)	SO2 Volumetric Emission Limit	EPA Method 20, Determination of Nitrogen Oxides, Sulfur		
		Dioxide, and Diluent Emissions from Stationary Gas Turbines		
60.333 (b)	Fuel Sulfur Limit (gaseous fuel)	ASTM D 1072-80, Standard Method for Total Sulfur in Fuel		
		Gases		
		ASTM D 3031-81, Standard Test Method for Total Sulfur in		
		Natural Gas by Hydrogenation		
NSPS 40 CFR 60.8	40 CFR 60, Appendix A	EPA Method 7,-Determination of Nitrogen Oxide Emissions from Stationary Sources		
00.8		EPA Method 20-Determination of Nitrogen Oxides, Sulfur		
		Dioxide, and Diluent Emissions from Stationary Gas Turbines		
PSD Permit				
PSD permit,	PSD permit, part IX-C.	EPA Method 7,-Determination of Nitrogen Oxide Emissions from Stationary Sources		
part IX-C.		EPA Method 20-Determination of Nitrogen Oxides, Sulfur		
		Dioxide, and Diluent Emissions from Stationary Gas Turbines		

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### IX. PERMIT SHIELD

### A. NON-APPLICABLE REQUIREMENTS

Pursuant to District Regulations 2-6-233 and 2-6-409.12, the federally enforceable regulations and/or standards cited in the following table[s] are not applicable to the source or group of sources identified at the top of the table[s]. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the regulatory and/or statutory provisions cited.

Table IX-A S101, S102 - BOILERS

Citation	Title or Description
	(Reason not applicable)
NSPS Subpart	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction
D	Is Commenced After August 17, 1971
	(Boiler capacity below 250 million btu/hr)
NSPS Subpart	Standards of Performance for Electric Utility Steam Generating Units for Which
Da	Construction Is Commenced After September 18, 1978
	(Boiler capacity below 250 million btu/hr)
NSPS Subpart	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units,
Db,	Standard for Sulfur Dioxide
40 CFR	(Boilers were built between 6/19/84 and 6/19/86 and are exempt from this requirement per
60.42b	60.40b(b)(3))
NSPS Subpart	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units,
Db,	Standard for Particulate
40 CFR	(Boilers were built between 6/19/84 and 6/19/86 and are exempt from this requirement per
60.43b	60.40b(b)(3))
NSPS Subpart	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating
Dc	Units
	(Boilers built before 6/9/89 and not modified or reconstructed since 6/9/89)

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# IX. Permit Shield (continued)

# A. Non-Applicable Requirements (continued)

Table IX-B S-103, No 2 Distillate Oil Storage Tank

Citation	Title or Description
	(Reason not applicable)
NSPS Subpart	Subpart K-Standards of Performance for Storage Vessels for Petroleum Liquids for Which
K	Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior
	to May 19, 1978
	(Storage tank contains No 2 fuel oil)
	Standards of Performance for Storage Vessels for Petroleum Liquids for Which
Subpart Ka-	Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior
	to July 23, 1984
	(Storage tank contains No 2 fuel oil)
BAAQMD	Storage of Organic Liquids
Regulation 8,	
Rule 5	(Section 8-5-117: Exemption, Low Vapor Pressure)

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# **IX.** Permit Shield (continued)

### **B. SUBSUMED REQUIREMENTS**

Pursuant to District Regulations 2-6-233 and 2-6-409.12, as of the date this permit is issued, the federally enforceable "subsumed" regulations and/or standards cited in the following table are not applicable to the source or group of sources identified at the top of the table. The District has determined that compliance with the "streamlined" requirements listed below and elsewhere in this permit will assure compliance with the substantive requirements of the "subsumed" regulations and/or standards. Enforcement actions and litigation may not be initiated against the source or group of sources covered by this shield based on the "subsumed" regulatory and/or statutory provisions cited.

Table IX-A S100, Turbine

Subsumed			
Requirement		Streamlined	
Citation	Title or Description	Requirements	Title or Description
NSPS	Standards of Performance for		
Subpart GG	Stationary Gas Turbines		
60.334 (a)	Fuel-to-water monitoring	PSD permit	Part IX, E: Continuous Emission
			Monitoring
60.334 (b)(1)	Fuel Sulfur monitoring (fuel oil)	PSD permit	Part IX, F: Fuel Usage and Sulfur
			Content
60.334 (b)(1)	Fuel Nitrogen Content monitoring	PSD permit	Part IX, E: Continuous Emission
	(fuel oil)		Monitoring
60.334 (b)(2)	Fuel Sulfur and Nitrogen Content	Title V	Requirement for use of PUC quality
	monitoring (natural gas)	Condition	natural gas
		14299	
60.334 (c)(1)	Periods of excess emissions, NOx	PSD permit	Part IX, E: Continuous Emission
			Monitoring
60.334 (c)(2)	Periods of excess emissions, SO2,	PSD permit	Part IX, F: Fuel Usage and Sulfur
	fuel oil		Content
60.334 (c)(2)	Periods of excess emissions, SO2,	Title V	Requirement for use of PUC quality
	natural gas	Condition	natural gas
		14299	

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#### Permit Shield (continued) IX.

# **Table IX-B** S101-102, Boilers

Subsumed			
Requirement		Streamlined	
Citation	Title or Description	Requirements	Title or Description
NSPS	<b>General Provisions</b>		
Subpart A			
60.7(c)	Continuous Monitoring Systems	PSD Permit	Part VII, E: Continuous Emission
			Monitoring
60.7(d)	Summary Report Forms	PSD Permit	Part VII, E: Continuous Emission
			Monitoring
60.7(e)	Records	PSD Permit	Part VII, E: Continuous Emission
			Monitoring
60.7(f)	Notification to Local Agency	PSD Permit	Part VII, E: Continuous Emission
			Monitoring
60.7(g)	Special Provisions	PSD Permit	Part VII, E: Continuous Emission
			Monitoring
60.13	Monitoring Requirements	PSD Permit	Part VII, E: Continuous Emission
			Monitoring
NSPS	Standards of Performance for		
Subpart Db	Industrial-Commercial-		
	Institutional Steam Generating		
	Units		
60.46b	Compliance and performance test	BACT	BAAQMD Permit condition #2780,
	methods and procedures for	monitoring	Parts 11 and 14
	particulate matter and nitrogen		
	oxides		
60.48b	Emission monitoring for	BACT	BAAQMD Permit condition #2780,
	particulate matter and nitrogen	monitoring	Parts 11 and 14
	oxides		
60.49b	Reporting and recordkeeping	BACT	BAAQMD Permit condition #2780,
	requirements	monitoring	Parts 11 and 14

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### X. GLOSSARY

#### **BAAQMD**

Bay Area Air Quality Management District

#### RACT

Best Available Control Technology

#### CAA

The federal Clean Air Act

#### **CAAQS**

California Ambient Air Quality Standards

#### **CEQA**

California Environmental Quality Act

#### **CFR**

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

#### CO

Carbon Monoxide

#### **Cumulative Increase**

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

#### **District**

The Bay Area Air Quality Management District

#### EPA

The federal Environmental Protection Agency.

#### **Excluded**

Not subject to any District Regulations.

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# X. Glossary

#### Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60, (NSPS), Part 61, (NESHAPS), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), and also including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

#### HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by both 40 CFR Part 63, and District Regulation 2, Rule 5.

#### **Major Facility**

A facility with potential emissions of regulated air pollutants greater than or equal to 100 tons per year, greater than or equal to 10 tons per year of any single hazardous air pollutant, and/or greater than or equal to 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity as determined by the EPA administrator.

#### **MFR**

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Act and implemented by District Regulation 2, Rule 6.

#### **MOP**

The District's Manual of Procedures.

#### NAAQS

National Ambient Air Quality Standards

#### **NESHAPS**

National Emission Standards for Hazardous Air Pollutants. Contained in 40 CFR Part 61.

#### **NMHC**

Non-methane Hydrocarbons

#### **NOx**

Oxides of nitrogen.

#### **NSPS**

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Act, and implemented by both 40 CFR Part 60 and District Regulation 10.

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# X. Glossary

#### **NSR**

New Source Review. A federal program for preconstruction review and permitting of new and modified sources of air pollutants for which the District is classified "non-attainment". Mandated by Title I of the Clean Air Act and implemented by 40 CFR Parts 51 and 52 as well as District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

#### **Offset Requirement**

A New Source Review requirement to provide federally enforceable emission offsets at a specified ratio for the emissions from a new or modified source and any pre-existing cumulative increase minus any onsite contemporaneous emission reduction credits. Applies to emissions of POC, NOx, PM10, and SO2.

#### **Phase II Acid Rain Facility**

A facility that generates electricity for sale through fossil-fuel combustion and by virtue of certain other characteristics (defined in Regulation 2, Rule 6) is subject to Titles IV and V of the Clean Air Act.

#### POC

**Precursor Organic Compounds** 

#### **PM**

**Total Particulate Matter** 

#### **PM10**

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

#### **PSD**

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

#### SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

#### SO<sub>2</sub>

Sulfur dioxide

#### Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit

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# X. Glossary

program for major and certain other facilities.

# VOC

Volatile Organic Compounds

# **Units of Measure:**

bhp	=	brake-horsepower
btu	=	British Thermal Unit
g	=	grams
gal	=	gallon
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
$m^2$	=	square meter
min	=	minute
mm	=	million
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year

Expiration Date: December 18, 2003

ID: BFC

#### XI. APPENDIX A - APPLICABLE STATE IMPLEMENTATION PLAN

See Attachments